

AMENDMENTS

Listing of Claims

This listing of claims replaces all prior versions and listings of claims in the application.

- 1 1. (Currently amended) A system for generating amplitude matched, phase
2 shifted signals, comprising:
3 a filter arrangement including a plurality of nodes, each node configured to
4 provide an associated vector that is offset in phase from a vector associated with each
5 other node; and
6 an adjustable element associated with each node, the adjustable element
7 configured to receive a feedback signal and in response to the feedback signal
8 substantially equalize an amplitude of each vector associated with each node.
- 1 2. (Original) The system of claim 1, wherein four nodes are associated
2 with the filter arrangement, each node having an associated vector.
- 1 3. (Original) The system of claim 2, further comprising:
2 an adder element configured to add the four vectors resulting in eight phase
3 shifted vectors.
- 1 4. (Original) The system of claim 3, further comprising:
2 a scaler configured to scale the amplitude of the four vectors resulting in eight
3 amplitude matched phase shifted vectors.
- 1 5. (Original) The system of claim 4, wherein the adjustable element is an
2 adjustable resistance.
- 1 6. (Original) The system of claim 5, wherein the adjustable resistance is a
2 metal oxide semiconductor field effect transistor (MOSFET) adjustable resistance.

1 7. (Original) The system of claim 4, wherein the adjustable element is an
2 adjustable capacitance.

1 8. (Original) The system of claim 7, wherein the adjustable capacitance is
2 a varactor.

1 9. (Currently amended) A method for generating amplitude matched,
2 phase shifted signals, comprising:
3 providing a plurality of vectors, each vector associated with a node, each vector
4 offset in phase from each other vector associated with each other node; and
5 providing a feedback signal to each node; and
6 adjusting each node using the feedback signal to substantially equalize an
7 amplitude of each vector associated with each node.

1 10. (Original) The method of claim 9, wherein a resistance associated with
2 each node is adjusted to substantially equalize an amplitude of each vector associated
3 with each node.

1 11. (Original) The method of claim 9, wherein a capacitance associated
2 with each node is adjusted to substantially equalize an amplitude of each vector
3 associated with each node.

1 12. (Original) The method of claim 10, further comprising adjusting the
2 resistance using a metal oxide semiconductor field effect transistor (MOSFET)
3 adjustable resistance.

1 13. (Original) The method of claim 12, further comprising combining four
2 vectors associated with each of four nodes resulting in eight phase shifted vectors.

1 14. (Original) The method of claim 13, further comprising scaling the four
2 vectors resulting in eight substantially amplitude matched phase shifted vectors.

1 15. (Original) The method of claim 11, further comprising adjusting the
2 capacitance using a varactor.

1 16. (Original) The method of claim 15, further comprising combining four
2 vectors associated with each of four nodes resulting in eight phase shifted vectors.

1 17. (Original) The method of claim 16, further comprising scaling the four
2 vectors resulting in eight amplitude matched phase shifted vectors.

1 18. (Currently amended) A system for generating amplitude matched, phase
2 shifted signals, comprising:

3 filter means including a plurality of nodes, the filter means for providing a
4 plurality of associated vectors that are offset in phase from each other vector associated
5 with each other node; and

6 means for providing a feedback signal to each node; and

7 means for using the feedback signal to substantially equalize ~~equalizing~~ an
8 amplitude of each vector associated with each node.

1 19. (Original) The system of claim 18, wherein the means for substantially
2 equalizing an amplitude of each vector comprises adjustable resistance means.

1 20. (Original) The system of claim 18, wherein the means for substantially
2 equalizing an amplitude of each vector comprises adjustable capacitance means.

1 21. (Original) The system of claim 19, wherein the adjustable resistance
2 means comprises a metal oxide semiconductor field effect transistor (MOSFET)
3 adjustable resistance.

1 22. (Original) The system of claim 21, further comprising:
2 adder means for combining four vectors associated with each of four nodes
3 resulting in eight phase shifted vectors.

1 23. (Original) The system of claim 22, further comprising:
2 scaler means for scaling an amplitude of the four vectors resulting in eight
3 substantially amplitude matched phase shifted vectors.

1 24. (Currently amended) A system for generating amplitude matched, phase
2 shifted signals, in a portable communication device, comprising:
3 a portable communication device including a transmitter and a receiver;
4 a synthesizer for providing a local oscillator signal;
5 a filter arrangement configured to operate on the local oscillator signal, the filter
6 arrangement including a plurality of nodes, each node configured to provide an
7 associated vector that is offset in phase from a vector associated with each other node;
8 and
9 an adjustable element associated with each node, the adjustable element
10 configured to receive a feedback signal and in response to the feedback signal
11 substantially equalize an amplitude of each vector associated with each node.

1 25. (Original) The system of claim 24, wherein four nodes are associated
2 with the filter arrangement, each node having an associated vector.

1 26. (Original) The system of claim 25, further comprising:
2 an adder element configured to add the four vectors resulting in eight phase
3 shifted vectors.

1 27. (Original) The system of claim 26, further comprising:
2 a scaler configured to scale an amplitude of the four vectors resulting in eight
3 substantially amplitude matched phase shifted vectors.

1 28. (Original) The system of claim 27, wherein the adjustable element is an
2 adjustable resistance.

1 29. (Original) The system of claim 28, wherein the adjustable resistance is a

2 metal oxide semiconductor field effect transistor (MOSFET) adjustable resistance.

1 30. (Original) The system of claim 27, wherein the adjustable element is an
2 adjustable capacitance.

1 31. (Original) The system of claim 30, wherein the adjustable capacitance
2 is a varactor.